1.0 BACKGROUND

Dutro Company submitted this application for an Authority to Construct and Permit to operate the following equipment:

S-1 Paint Spray Booth

Spray booth is used for coating of miscellaneous metal parts and products like carts, dollies etc. All the coatings used are high gloss finishes and hence will qualify as Specialty Coatings as stated in Section 8-19-312.2. This section limits the VOC content of air-dried specialty coatings to 3.5 pounds per gallon.

2.0 EMISSION CALCULATIONS

Table 2-1, Usage and Emission Calculations, summarizes the proposed usage and estimated emission calculations at S-1 (Paint Spray Booth).

TABLE 2-1
Usage and Emission Calculations

MATERIAL DESCRIPTION	USAGE (gals/yr)	VOC CONTENT (lbs/gal)	POC (lbs/yr)	POC (tpy)
Permakote Plus Safety Yellow (ID #: 37G382)	192	3.46	664.32	0.332
Tripoxy I Desert Tan (ID #: 41G016)	33	3.06	100.98	0.051
Tripoxy I Curing Agent (ID #: 41B)	33	3.50	115.50	0.058
R00249 Krylon Rust Tough Enamel	18	3.38	60.84	0.030
Methyl Ethyl Ketone (Product Code: 3540000)	110	6.71	738.10	0.369
Solvent A81	220	6.90	1,518.00	0.759
		TOTALS:	3,197.74	1.599

2.1 Average Daily Emissions:

POC = (3,197.74 lbs/yr) ÷ (255 days/yr) = 12.54 lbs/day

2.2 Plant Cumulative Increase:

POC = 0.000 tpy *(existing)* + 1.599 tpy *(new)* = *1.599 tpy*

2.3 Toxics:

TABLE 2-2

TAC	Material	Weight	Usage (gals/yr)	VOC (lbs/gal)	Emission (lb/yr)	Trigger Limit (lb/yr)
Toluene	Solvent A81	.45	220	6.90	683.10	39,000
Xylene	Permakote Plus Yellow Tripoxy Tan Tripoxy Curing Agent Solvent A81 Total	.05 .15 .10 0.28	192 33 33 220	3.46 3.06 3.50 6.90	33.22 15.15 11.55 425.04 484.96	58,000
Naphthalene	Permakote Plus Yellow	.01	192	3.46	6.64	120,000
2-Butoxy ethanol	Tripoxy Curing Agent	.10	33	3.50	11.55	3,900
Methyl Ethyl Ketone	Permakote Plus Yellow Tripoxy Tan MEK Solvent Total	.01 .001 1.00	192 33 110	3.46 3.06 6.71	6.64 0.10 738.10 744.84	150,000
Butyl Alcohol	Tripoxy Tan Tripoxy Curing Agent Total	.01 0.10	33 33	3.06 3.50	1.01 11.55 12.56	140,000
2-Ethoxyethyl Acetate	Tripoxy Tan	0.10	33	3.06	10.10	13,000
Formaldehyde	Tripoxy Tan	.001	33	3.06	0.10	33
Isopropyl Alcohol	Tripoxy Curing Agent	0.15	33	3.50	17.33	440,000

As illustrated in Table 2-2 above, the toxic compound emissions are below its toxic trigger level; therefore, a health risk screening analysis is not required pursuant to Regulation 2, Rule 1, Section 316.

2.4 BACT:

S-1 is BACT2 compliant as coatings with VOC content less than that required by Section 8-19-312.2 (i.e., < 3.5 lb/gal) are being used. Per May 29,1998 Division memo on "Cost-effectiveness of Fixed-bed Carbon Adsorption Systems as BACT for VOC Sources", BACT1 is not cost-effective for reducing, in this case, 12.54 pounds per day of POC emissions. Hence, BACT1 is impractical.

2.5 Offsets:

POC OFFSET requirements are not triggered since facility wide emissions are less than 15 tpy.

3.0 STATEMENTS OF COMPLIANCE

The Spray booth (S-1) is subject to and in compliance with District Regulation 8, Rule 19, and Section 312.2. Regulation 8-19-312 identifies the VOC standards for High Gloss specialty coatings applied to any miscellaneous metal part. All coatings in use by Dutro Company are complying (VOC <3.5 lb/gal).

The project is considered to be ministerial under the District's CEQA regulation 2-1-311 and therefore is not subject to CEQA review (PHBK Chapter 5). The engineering review for this project requires only the application of standard permit conditions and standard emissions factors and therefore is not discretionary as defined by CEQA.

As illustrated in Table 2-2 above, Section 2.0, the toxic compound emissions are below their respective toxic trigger levels for S-1; therefore, a health risk screening analysis is not required pursuant to Regulation 2, Rule 1, Section 316.

PSD, NSPS, and NESHAPS do not apply.

4.0 PUBLIC NOTIFICATION

Source S-1 is located within 1,000 feet of the nearest public school (Emery Middle School) and hence this project is subject to the public notification requirements contained in Regulation 2-1-412. These requirements apply to the parents of the students at Emery Middle School, the parents of the students at any other school within 1/4 mile of the source, and all other addresses within 1,000 feet of the source.

5.0 PERMIT CONDITIONS

Conditions for S-1 (Paint Spray Booth):

1. Usage of coatings and solvents shall not exceed the following limits, in consecutive twelve-month period:

   a. Permakote Plus Safety Yellow (ID #: 37G382) =192 gallons
   b. Tripoxy I Desert Tan (ID #: 41G016) =33 gallons
   c. Tripoxy I Curing Agent (ID #: 41B) =33 gallons
   d. R00249 Krylon Rust Tough Enamel =50 gallons
   e. Methyl Ethyl Ketone Solvent (Product Code: 3540000) =110 gallons
   f. Solvent A81 =220 gallons

   [Basis: Cumulative Increase]

2. The VOC content of any coating applied to metal parts shall not exceed 3.5 pounds of VOC per gallon.
   [Basis: BACT]

3. Coatings and Solvents other than the materials specified in Condition 1, and/or usages in excess of those specified in Condition 1, may be used at S-1, provided that the owner/operator can demonstrate that both the following are satisfied:

   a. Total POC emissions from S-1 do not exceed 3,197.74 pounds in any consecutive twelve-month period.
   b. The usage of these materials does not increase toxic emissions above any risk screening trigger level listed in Table 2-1-316 of Regulation 2-1.

   [Basis: Cumulative Increase, Toxic Risk Screen]

4. To determine compliance with the above conditions, the owner/operator shall maintain the following records and provide all of the data necessary to evaluate compliance with the above conditions, including, but not necessarily limited to, the following information:

   a. Type and monthly usage of all POC containing materials used;
   b. If a material other than those specified in Condition 1 is used or a material specified in Condition 1 is used in excess of the limit in Condition 1, POC and toxic component contents of each material used; and mass emission calculations to demonstrate compliance with Condition 3, on a monthly basis;
   c. Monthly usage and/or emission calculations shall be totaled for each consecutive twelve-month period.

   [Basis: Cumulative Increase, Toxic Risk Screen]

6.0 EXEMPTIONS

None

7.0 RECOMMENDATION

Issue a Permit to Operate for the following source:

S-1 Paint Spray Booth

By:_____
Sanjeev Kamboj
Air Quality Engineer

Date: _____